

Articles

SECOND THOUGHTS: HOW HUMAN CLONING CAN PROMOTE HUMAN DIGNITY

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*We decant our babies as socialized human beings,
as Alphas and Epsilons*

Aldous Huxley**

*Are you, then, so easily turned from your design?
Did you not call this a glorious expedition?*

Mary Shelley***

This may be called the cunning of Reason

G.W.F. Hegel****

I. INTRODUCTION

In 1997, the announcement of the cloning of a sheep prompted a number of distinctly negative responses. These responses ranged from the emotional and intuitive to the highly technical and carefully articulated. Given the potentially large moral and legal stakes, it is important to think as best we can about the various possible future kinds of human cloning, and about possible justifications for and possible legal regulatory limits on such cloning. If we postpone our best thinking about human cloning until it is actually feasible, technological imperatives and market demand may render much of our thinking practically irrelevant.

The most common objection to human cloning sees some or all such cloning as somehow incompatible with human dignity. This objection of course presupposes some understanding of the idea of human dignity. An account of human dignity in the context of human cloning is, as we shall see below, extremely important. Our ultimate attitude toward human cloning and its legal regulation will crucially depend on our understanding of the idea of human dignity.

To briefly anticipate our conclusion, the dignitary and related objections to many sorts of human cloning are misplaced. Remarkably, these objections turn out to be backward and even unintentionally perverse. For reasons developed below, the unanticipated, ironic consequence of mainstream forms of human cloning is instead likely to be the clarification and highlighting of the actual nature and grounds of human dignity. Whatever the expectations of either its supporters or its critics, the typical forms of human cloning are in the long run likely to actually deepen and enhance our appreciation of human dignity.

II. DIGNITARY OBJECTIONS TO HUMAN CLONING

A. *Some Initial Considerations*

If we are in any sense unprepared for human cloning, our lack of preparedness may be reflected in the quality of our collective moral and legal discussion. We may begin, and perhaps even unfortunately end, our ethical debate with merely emotive reactions,¹ with a benchmark standard of becoming morally "comfortable with a situation,"² or with

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**ALDOUS HUXLEY, *BRAVE NEW WORLD* 13 (First Perennial Classics ed., 1998) (1932).

***MARY SHELLY, *FRANKENSTEIN* 197 (1991) (1818).

****GEORG WILHELM FRIEDRICH HEGEL, *REASON IN HISTORY* 43-44 (Robert S. Hartman trans. 1953) (1837) (*italics in the original*).

¹ "'Offensive.' 'Grotesque.' 'Revoltng.' 'Repugnant.' 'Repulsive.' These are the words most commonly heard regarding the prospect of human cloning." Leon R. Kass, *The Wisdom of Repugnance: Why We Should Ban the Cloning of Humans*, 32 VAL. U. L. REV. 679, 686 (1998).

² See generally Michael J. Reiss, *What Sort of People Do We Want? The Ethics of Changing People Through Genetic Engineering*, 13 NOTRE DAME J.L. ETHICS & PUB. POL'Y 63, 82 (1999) (citing the theologian Ian Barbour on delaying human germ-line therapy not only for safety testing, but to allow sufficient time to elapse so that persons may become 'comfortable' with the idea). Of course, the dividing line between increasing "comfort" over time and sheer "desensitization" to human cloning may not always be clear.

merely conventionalist moral standards.³ We may well have difficulty in attributing the proper moral weight to the intended consequences, the foreseeable consequences, and the unforeseen consequences of our decisions on human cloning.⁴ Unanticipated or long-term consequences of human cloning policies may of course be either good or bad, and either important or unimportant, but such unanticipated consequences may become recognizable to us only after it is too late to do much about them.⁵ And even some critics of human cloning suspect that for broad cultural and technological reasons, debate may already be largely pointless, in that human cloning may, realistically, simply be inevitable.⁶ There may seem little point in debating the desirability of that which is inescapable.

Ethical and legal discussion of human cloning may, for these reasons, turn out to be either unimpressive in quality or in some respects futile. But we can, at least within limits, still have some control over the quality of the debate. And even if some forms of human cloning are practically inevitable, at least some of the most nightmarish abuses of human cloning technology may still be subject to reasonably effective legal regulation, either at the national or international level.

The language of the moral and legal debate over human cloning, especially from the standpoint of many opponents of human cloning,

³ See, e.g., John A. Robertson, *Two Models of Human Cloning*, 27 HOFSTRA L. REV. 609, 632-33 (1999) (focusing on conventional understandings of family, parenting, kinship, and procreative freedom).

⁴ See, e.g., John Robinson, *Why an Acceptable Cloning Policy Will Be Hard to Achieve*, 13 NOTRE DAME J.L. ETHICS & PUB. POL'Y 9, 12 (1999) (referring specifically to "how resistant modern scientific thought has been to efforts to distinguish intended effects from those that are merely foreseen").

⁵ For case studies of unanticipated consequences in other contexts, see, e.g., Paul J. Culhane, *NEPA's Impact on Federal Agencies, Anticipated and Unanticipated*, 20 ENVTL. L. 681 (1990); LENORE J. WEITZMAN, *THE DIVORCE REVOLUTION: THE UNEXPECTED SOCIAL AND ECONOMIC CONSEQUENCES FOR WOMEN AND CHILDREN IN AMERICA* (1985).

⁶ See, e.g., George J. Annas, *Human Cloning: A Choice or An Echo*, 23 U. DAYTON L. REV. 247, 260 (1998) (medical invention as the mother of necessity); Lisa Sowle Cahill, *No Human Cloning: A Social Ethics Perspective*, 27 HOFSTRA L. REV. 487, 495 (1999) (citing Daniel Callahan and Lori Andrews); Editorial: *Don't Clone People*, WASH. POST, Apr. 10, 2000, at A20. For a much broader argument, see JACQUES ELLUL, *THE TECHNOLOGICAL SOCIETY* 99 (John Wilkinson trans., 1970) (1954) ("[E]verything which is technique is necessarily used as soon as it is available, without distinction of good or evil. This is the principal law of our age . . . 'Since it was possible, it was necessary.' Really a master phrase for all technical evolution.").

commonly focuses on human dignity. This focus on human dignity is characteristic of private citizens and scholars,⁷ religious officials and organizations,⁸ international organizations⁹ as well as governments at

⁷ See, e.g., Ted Peters, *Cloning Shock: A Theological Reaction*, in HUMAN CLONING: RELIGIOUS RESPONSES 12, 21 (Ronald Cole-Turner ed., 1997) (discussing how economic forces tending to commodify children, thereby raising dignitary concerns, are potentially aided by human cloning); Marciano Vidal, *Cloning: Technical Reality and Ethical Evaluation*, in THE ETHICS OF GENETIC ENGINEERING 102, 109 (Maureen Junker-Kenny & Lisa Sowle Cahill eds., 1998) (examining human cloning as inescapably treating humans as objects, contrary to human dignity); Lori B. Andrews, *Is There a Right to Clone? Constitutional Challenges to Bans on Human Cloning*, 11 HARV. J.L. & TECH. 643, 666 (1998) (finding cloning as "a challenge to human dignity"); Annas, *supra* note 6, at 273 (analyzing the threat of humans as designed products, "undermining the uniqueness on . . . which human dignity is based"); Kass, *supra* note 1, at 705 (comparing both human artificiality and slavery to "unregulated progress" to wisdom, prudence, freedom, and "human dignity"); M. Cathleen Kaveny, *Cloning and Positive Liberty*, 13 NOTRE DAME J.L. ETHICS & PUB. POL'Y 15, 27-28 (1999) (expressing a concern for "fundamental dignity"); Sophia Kolehmainen, *Human Cloning: Brave New Mistake*, 27 HOFSTRA L. REV. 557 (1999); Gilbert Meilaender, *Cloning in Protestant Perspective*, 32 VAL. U. L. REV. 707, 711 (1998) (expressing "human begetting" as "our equal dignity"); John A. Robertson, *Liberty, Identity, and Human Cloning*, 76 TEX. L. REV. 1371, 1410 (1998) ("[T]he initial reaction to human cloning, particularly in Europe, was that it was a violation of human dignity and identity."); Note, *Human Cloning and Substantive Due Process*, 111 HARV. L. REV. 2348, 2350 (1998) ("A common objection is that human cloning poses a serious threat to human dignity."); Jorge Garcia, *Who's Afraid of Human Cloning?*, FIRST THINGS, Mar. 1999, at 54-56 (book review) (discussing the threat to "human uniqueness and dignity" of the design and manufacture of human persons).

⁸ See, e.g., Sr. Teresa Auer, OSF, *Cloning: A Catholic Moral Evaluation* (Dec. 11, 1999) available at <http://www.ewtn.com/library/PROLIFE/CLONING.TXT> (viewing human cloning as "immoral because it opposes the dignity both of human procreation and of the conjugal union"); Congregation For the Doctrine of the Faith, *Respect For Human Life* (Feb. 22, 1987) available at <http://www.cin.org/vatcong/donumuit.html> (stating that human cloning is "in opposition to the dignity both of human procreation and of the conjugal union"); Pontifical Academy For Life, *Reflections on Human Cloning* (Dec. 11, 1999) available at <http://www.ewtn.com/library/PROLIFE/CLONING.HTM> ("[H]uman cloning must also be judged negative [sic] with regard to the dignity of the person cloned. . .").

⁹ See, e.g., *Additional Protocol on the Prohibition of Cloning Human Beings*, ETS no. 168 (Dec. 1, 1998) (prohibiting "any intervention seeking to create a human being genetically identical to another human being, whether living or dead"); *Cloning in Human Health, Report by the Secretariat*, World Health Organization, 52d World Health Assembly, U.N. Doc. A52/12 (1999) ("[C]loning for the replication of human individuals is ethically unacceptable and contrary to human dignity and integrity."); Council of Europe, *Convention For the Protection of Human Rights and Dignity of the Human Being with Regard to the Application of Biology and Medicine: Convention on Human Rights and Biomedicine*, ETS no. 164 (April 4, 1997); *Opinion of the CDBI on Human Cloning*, Steering Committee on Bioethics, Committee of Ministers, Council of Europe (1997), available at <http://www.coe.fr/cm/reports/cmdocs/1997/97cmlll.html> ("[T]he instrumentalisation of human beings through the deliberate creation of genetically identical human beings is contrary to human dignity and thus constitutes a misuse of medicine and biology."); *Records of the General Conference*, U.N. Educational, Scientific and Cultural Organization,

various levels, including foreign governments,¹⁰ the American federal government,¹¹ and even American state governments.¹² Questions of human dignity will take center stage for us as well.

B. Dignity, Privacy, and Autonomy

The objection to human cloning based on human dignity has been elaborated in a number of ways and with reference to a number of ideas. The idea of human dignity in the context of human cloning is in some cases, for example, linked to the idea of privacy. Would it violate the privacy of the cloning "recipient" if we knew, or even thought we knew, the fairly precise genetic limitations and capacities of that cloning recipient in light of our knowledge of the genetic life already led by the cloning "donor?"¹³ Could the sheer multiplicity of numerous clones similar in appearance, or just the erosion of individuality inherent in

29th Sess., at 44 (1998) ("Practices which are contrary to human dignity, such as reproductive cloning of human beings, shall not be permitted."). See also Melissa K. Cantrell, *International Response to Dolly: Will Scientific Freedom Get Sheared?*, 13 J.L. & HEALTH 69 (1998-99). The reference to 'Dolly' is of course a reference to the sheep cloned in 1997 by Ian Wilmut's team. See Ian Wilmut et al., *Viable Offspring Derived From Fetal and Adult Mammalian Cells*, 385 NATURE 810 (1997).

¹⁰ See, e.g., *Japanese Expert Panel Urges Ban On Human Cloning*, AGENCE FRANCE-PRESSE, July 29, 1999, at 1, available at 1999 WL 2645989 ("[T]he government should take heed of the concerns, felt by a majority of Japanese people, over human cloning" . . . "[i]n addition to human cloning, we strongly opposed creating a living thing out of human and animal cells . . . Such practices must be banned absolutely.").

¹¹ For a summary overview of some of the early developments and machinations at the federal level, see Heidi Forster & Emily Ramsey, *Legal Responses to the Potential Cloning of Human Beings*, 32 VAL. U. L. REV. 433, 435-36 (1998). Much of the ethical impetus behind American legal regulatory efforts is attributable to a National Bioethics Advisory Commission report submitted in response to a request by President Clinton. See NATIONAL BIOETHICS ADVISORY COMMISSION, *CLONING HUMAN BEINGS: REPORT AND RECOMMENDATIONS OF THE NATIONAL BIOETHICS ADVISORY COMMISSION 49-51* (1997) [hereinafter CLONING HUMAN BEINGS]. Concern for human dignity is central to this report. See *id.* at 49-51 ("To treat persons who are . . . created through cloning as mere objects, means or instruments violates the religious principle of human dignity as well as the secular principle of respect for persons."). For federal regulatory developments, see generally Gregory J. Rokosz, *Human Cloning: Is the Reach of FDA Authority Too Far a Stretch?*, 30 SETON HALL L. REV. 464 (2000).

¹² See, e.g., CAL. BUS. & PROF. CODE § 2260.5 (West 2000) (prohibiting human cloning as unprofessional medical conduct until January 1, 2003); CAL. HEALTH & SAFETY CODE § 24185 (West 2000) (stating that "[n]o person shall clone a human being" and offering a quite typically problematic definition of 'clone').

¹³ See, e.g., Andrews, *supra* note 7, at 657.

human cloning, threaten privacy and dignity?¹⁴ On the other hand, couldn't the actual practice of some forms of human cloning actually involve less intrusion into the family from outsiders than other forms of assisted reproduction?¹⁵ In such a case, cloning could actually turn out to be a relatively privacy protective, as opposed to privacy invasive, reproductive technique.¹⁶

Dignity-based objections to human cloning are also sometimes linked to violations of human autonomy. Admittedly, in some cases there may be possible tradeoffs between dignity and autonomy,¹⁷ even though respect for autonomy is most often conducive to human dignity.¹⁸ It has certainly been suggested that there may be some linkages between lack of autonomy and lack of dignity in the context of human cloning. For example, Professor Cathleen Kaveny raises the possibility that cloning may undermine "the conditions for autonomy"¹⁹ of the child, somehow undermining the child's mental capacities, given the child's knowledge that she in some sense has only one genetic parent²⁰ instead of the customary two. Kaveny is concerned as well for the resulting child's sense of an open future, given the possible effects of

¹⁴ See *id.*

¹⁵ See David Orentlicher, *Cloning and the Preservation of Family Integrity*, 59 LA. L. REV. 1019 (1999) (arguing this basic proposition).

¹⁶ See *id.*

¹⁷ See generally R. George Wright, *Consenting Adults: The Problem of Enhancing Human Dignity Non-Coercively*, 75 B.U. L. REV. 1397 (1995).

¹⁸ See, e.g., JOHN STUART MILL, *ON LIBERTY* (David Spitz ed., 1975).

¹⁹ Kaveny, *supra* note 7, at 29.

²⁰ Even if we ignore the sense in which everyone, clone or not, is the genetic product of many different persons, it may be hasty to suppose that all common human cloning techniques will involve significant genetic contributions from only one person. Doubtless advancing technology will open up a wider range of possibilities, some more traditionalist than others. It also seems possible that a child resulting from, say, the genetic material in a father's nuclear cell material and a mother's mitochondrial genetic material residing outside the nucleus of the original clone cell may be genetically affected, to some as yet unknown degree, by the mitochondrial genetic material not attributable to the father. This scenario also sets aside the various other genetic, biological, intrauterine, and (other) environmental influences on the child. See, e.g., Orentlicher, *supra* note 15, at 1019 n.1; Michael H. Shapiro, *The Impact of Genetic Enhancement on Equality*, 34 WAKE FOREST L. REV. 561, 567 n.19 (1999) ("The genome only provides the blueprint for formation of the brain; the finer details of assembly and intellectual development are beyond direct genetic control and must perforce be subject to innumerable stochastic and environmental influences.") (quoting Jon W. Gordon, *Genetic Enhancement in Humans*, 283 SCI. 2023-24 (1999)).

cloning on the child's sense of unmanipulated independence and the child's "sense of dignity."²¹

Professor Philip Kitcher makes a related cautionary argument:

If cloning a human being is undertaken in the hope of generating a . . . person whose standards of what matters in life are imposed from without, then it is morally repugnant, not because it involves biological tinkering, but because it is continuous with other ways of interfering with human autonomy that we ought to resist.²²

It has also been argued that cloning may give one a sense of a closed, predetermined, non-individualized identity, undermining one's sense of privacy and autonomy, whether others know one to be a clone or not.²³ Certainly, all of these autonomy-related arguments deserve to be taken with appropriate seriousness.

But most forms of human cloning need not be locked into any special conflict with human autonomy. We will discuss autonomy and dignity in a distinctly Kantian sense below.²⁴ But even an initial common sense analysis suggests the long-term compatibility of autonomy, in its ordinary senses and usages, with most forms of human cloning. Certainly no consideration remotely sufficient to justify a general ban of human cloning emerges.

Initially, there may well be many cloners who will naively expect a clone to display all the distinctive and valued attributes of their nuclear progenitor, especially if the clone is also trained or educated constantly along the desired lines. The cloner may believe himself to have fairly paid for a supposedly unbeatable combination of heredity and environment. If one has paid good money for a somatic cell of Michael Jordan, one is hardly inclined to accept a resulting mediocre

²¹ Kaveny, *supra* note 7, at 29.

²² PHILIP KITCHER, *THE LIVES TO COME: THE GENETIC REVOLUTION AND HUMAN POSSIBILITIES* 335 (1996).

²³ See Andrews, *supra* note 7, at 657.

²⁴ See *infra* Part V.

basketball-playing clone.²⁵ Buyers may be in no mood to hear about the limits of heredity or of the fallacies of biological determinism. Perhaps one might even bitterly argue for an implied warranty of fitness for particular purpose.²⁶

Of course, if there are dozens or hundreds of authorized or bootlegged Michael Jordan clones, all, let us miraculously assume, with the athletic skills and competitive determination of the original, that by itself might well tend to drive down the market value of exhibiting precisely those skills.²⁷ But we may predict disappointment among buyers even if the most basic laws of supply and demand were to somehow be repealed. Genetics, or at least cellular nuclear material, is not destiny.²⁸ Nor is destiny even a matter of genetics reinforced by incessant parental browbeating. No parent, for example, can control the clone's broader historical and cultural environment. A clone of Adam Sandler might not be considered riotously hilarious in all possible worlds. We can even imagine circumstances in which a second Beethoven or a second Einstein would not reach iconic status, due to changes in public taste, or a change in the basic nature of the physics problems of the day.²⁹ Is a clone of Gandhi at all likely to become a saintly inspiration to millions?

In fact, we may suspect that as "parental" expectations of the clone's flourishing in some predetermined way increase, some clones might tend all the more to resist those imposed expectations in one way or another, in extreme cases by self-sabotage or indifference, in other cases simply by insisting on one's own chosen path. Why should we

²⁵ It would seem irrelevant to this point whether one obtains the somatic cell with the 'donor's' consent or not.

²⁶ See U.C.C. § 2-315 (1998) (requiring an implied warranty where the seller has reason to know of buyer's particular purpose and the buyer relies on the seller's skill or judgment).

²⁷ See, e.g., ADAM SMITH, *AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS* (Edwin Cannan ed., Modern Library 1994) (1776).

²⁸ See Orentlicher, *supra* note 15, at 1022, 1026.

²⁹ Some physics problems can be visually represented or verbally stated in a comprehensible way; others cannot. See, e.g., RICHARD P. FEYNMAN, ET AL., *THE FEYNMAN LECTURES ON PHYSICS* 2-6, 2-7 (1963). Einstein himself, though a major early contributor to the very birth of quantum theory, was never entirely a comfortable adherent of the theory at the deepest level. See, e.g., Max Jammer, *The EPR Problem in its Historical Development*, in *SYMPOSIUM ON THE FOUNDATIONS OF MODERN PHYSICS* 129 (Pekka Lahti & Peter Mittelstaedt eds., 1985).

expect most clones to be exempt from all impulses of rebellion and defiance?

This is simply a matter of human experience, clone or not. Even the most thoughtfully selected and bred clone cannot come with a warranty. And it seems quite likely that human cloners will eventually realize this fact. Human autonomy will win out. The limitations of typical forms of human cloning as a way of generating pliant, cooperative tailored products will eventually pass into folk wisdom, and cloner expectations will generally be adjusted accordingly.³⁰ At that point, typically futile attempts to create and steer clones toward specific preselected goals may even diminish. Even the cloners may then come to admit the power of human autonomy.

Human cloning has also been opposed in other related, if vaguer terms. Ideas such as that of 'mystery,'³¹ the violation of 'sanctity,'³² 'untouchability,'³³ and 'desacralization'³⁴ have been deployed in opposition to human cloning. It is admittedly true that the vaguer the idea, the more difficult it is to know precisely how human cloning would affect it. But there is again no reason to simply assume that human cloning would eventually prove disastrous in some subtle but profound way. Let us suppose that human cloning somehow undermines or exposes some sort of mystery. Why should we place great value on any mystery that can be exposed merely through the process of human cloning? What is the value of a mystery that can be preserved only if we

³⁰ Cloning one's self, a relative, or a merely genetically healthy, culturally consensually beautiful, handsome, or tall person may come to be popular. Cloning merely for particular traits, such as eye color, may be more predictably manageable, but in their sheer unambitiousness pose no serious threat to the clone's autonomy. Cloning oneself or a relative simply as an open-ended experiment, out of curiosity, also does not threaten autonomy. To the extent that one clones oneself or a relative with the expectation that the resulting clone will have talents or a personality like the clone's progenitor, one will again be subject to disappointment, even if one attempts to raise the clone child in a coercively narrow, directed way.

³¹ See, e.g., Meilaender, *supra* note 7, at 709 (stating that the human cloning possibility "aims directly at the heart of the mystery that is a child").

³² See, e.g., CLONING HUMAN BEINGS, *supra* note 11, at 49.

³³ See, e.g., Statement of Lisa Sowle Cahill, in Religion-Based Perspectives on Cloning of Humans: Testimony Before National Bioethics Advisory Commission, in 14 ETHICS & MEDICINE 8, 12 (1998).

³⁴ BERNARD E. ROLLIN, THE FRANKENSTEIN SYNDROME: ETHICAL AND SOCIAL ISSUES IN THE GENETIC ENGINEERING OF ANIMALS 24 (1995) (raising and discussing the possibility of the desacralization of life through reductionism and manipulateness of genetic engineering).

decide to refrain from the technique of human cloning? Wouldn't a mystery of real value be a bit more durable, impenetrable, and profound?

There is admittedly a difference between explaining an apparent mystery and treating something profound with lack of respect. Treating a person contemptuously, for example, does not liberate us from some obscure and mysterious superstition. Contempt has no such favorable consequences. But as we shall see below,³⁵ human cloning in general, quite apart from anyone's intentions, may well actually turn out to enhance the deeper, more genuine mysteries upon which human dignity itself is genuinely based.

C. Cloning and Commodification

The dignitary objection to human cloning, however, can be stated a bit less mysteriously and a bit more concretely. In a culture preoccupied with commercial consumption,³⁶ it is certainly imaginable that human cloning will amount to a further step in the gradual overall commodification of life itself. A number of writers have expressed something like this fear of commodification.³⁷ More broadly, critics of

³⁵ See *infra* Part VI.

³⁶ See, e.g., STUART EWEN & ELIZABETH EWEN, *CHANNELS OF DESIRE: MASS IMAGES AND THE SHAPING OF AMERICAN CONSCIOUSNESS* (1982); MICHAEL SCHUDSON, *ADVERTISING, THE UNEASY PERSUASION: ITS DUBIOUS IMPACT ON AMERICAN SOCIETY* (1984); THE CULTURE OF CONSUMPTION: CRITICAL ESSAYS IN AMERICAN HISTORY, 1880-1980 (Richard Wightman Fox & T.J. Jackson Lears eds., 1983); R. GEORGE WRIGHT, *SELLING WORDS: FREE SPEECH IN A COMMERCIAL CULTURE* ch. 6 (1997); Pierre Schlag, *This Could Be Your Culture - Junk Speech In a Time of Decadence*, 109 HARV. L. REV. 1801 (1996) (reviewing RONALD K.L. COLLINS & DAVID M. SKOVER, *THE DEATH OF DISCOURSE* (1996)).

³⁷ See, e.g., Jan C. Heller, *Religiously Based Objections to Human Cloning: Are They Sustainable?*, in HUMAN CLONING 153, 169 (1997) (referring to "the concerns expressed for the potential to objectify and commodify the products of cloning"); Peters, *supra* note 7, at 21 (expressing a dignitary concern "based on the potential for cloning, along with other genetic technologies, to play into the hands of economic forces that will tend to commodify children"); Andrews, *supra* note 7, at 656-57; R. Alta Charo, *Cloning: Ethics and Public Policy*, 27 HOFSTRA L. REV. 503, 506 (1999) (referring to the argument that cloning "would encourage a kind of commercialization, or, at least, commodification, of children"); Elliot N. Dorff, *Human Cloning: A Jewish Perspective*, 8 S. CAL. INTERDISC. L.J. 117, 118 (1998) ("Even if we set aside the issue of who would be cloned, the very process of cloning commodifies human life."); Kass, *supra* note 1, at 697 ("[T]he violation of human equality, freedom, and dignity are present even in a single planned clone. And procreation dehumanized into manufacture is further degraded by commodification, a virtually inescapable result of allowing baby-making to proceed under the banner of commerce."); Leon R. Kass, *The Moral Meaning of Genetic Technology*, COMMENTARY, Sept. 1999, at 32, 35

human cloning are concerned that human reproduction will eventually be reduced³⁸ to the mere production³⁹ of objects.⁴⁰ Human life itself

(referring to genetic engineering developments in general, along with "the powerful economic interests that will surely operate in this area; with their advent, the commodification of nascent human life will be unstoppable"); Kolehmainen, *supra* note 7, at 561.

It has also been argued that there is a difference between reproductive technology that merely meets already existing needs and other forms of reproductive technology, including human cloning, that create new needs. See LORI B. ANDREWS, *THE CLONE AGE: ADVENTURES IN THE NEW WORLD OF REPRODUCTIVE TECHNOLOGY* 256 (1999) [hereinafter *ADVENTURES*]. The broad distinction between meeting preexisting needs and creating and then fulfilling new or artificial needs has been developed elsewhere. See, e.g., JOHN KENNETH GALBRAITH, *THE AFFLUENT SOCIETY* (1958). The problem with this distinction, though, generally and in the specific area of reproductive technology, is its lack of clarity. There seems at first glance to be some needs that are entirely natural, and other needs that are artificially induced. To induce a need and then fulfill that need seems akin to unproductively digging holes simply to fill them up again.

But can needs really be separated into the natural and the artificial? Don't most needs really partake to some degree of both? Don't most needs, even the most apparently artificial, have some basis in a widely shared, if not universal, drive or desire? And isn't the form or more precise character in which almost all needs are fulfilled largely an artificial, contingent cultural artifact? Eating a fast-food hamburger is not merely a primal, visceral fulfillment of the need to avoid starvation, but it has some such physiological basis apart from the many commercials that may have artificially steered us toward one chain or another. In some sense, after all, even cooking the hamburger is artificial; lions do not bother with cooking.

We may similarly conclude that human cloning has both relatively natural and relatively artificial, cultivated elements. Reproduction, and particularly reproducing one's own genetic line, may have basic biological roots. See, e.g., RICHARD DAWKINS, *THE SELFISH GENE* (1990). In this sense, cloning is deeply natural. Doubtless, on the other hand, human cloning is also highly artificial, in that humanity has progressed over virtually all of its historic journey without human cloning as a realistic option. Still, one could argue that cloning is in a sense more natural in its appeal than some long familiar consumer goods. An attempted distinction between in vitro fertilization and surrogate motherhood, on the one hand, as natural, and cloning, on the other hand, as an artificially induced need seems similarly doubtful. See *ADVENTURES*, *supra* note 37, at 256.

³⁸ See, e.g., Abigail Rian Evans, *Saying No to Human Cloning*, in *HUMAN CLONING: RELIGIOUS RESPONSES* 25 (Ronald Cole-Turner ed., 1997) (objecting to human cloning on grounds, among others, that "it fosters a reductionistic rather than a holistic view of human nature"). See also Shapiro, *supra* note 20, at 564 (referring more broadly to the problem of technologically-based reductionism).

³⁹ See, e.g., Peters, *supra* note 7, at 23 ("Reproduction will come to look more and more like production. Babies will come to look more and more like products.").

⁴⁰ See, e.g., Dan W. Brock, *Cloning Human Beings: An Assessment of the Ethical Issues Pro and Con*, in *CLONES AND CLONES: FACTS AND FANTASIES ABOUT HUMAN CLONING* 141, 159 (Martha C. Nussbaum & Cass R. Sunstein eds., 1998) (referring merely to the possibility that a cloned child might come "to be objectified, valued only as an object and for its genome, or at least for its genome's expected phenotypic expression, and no longer recognized as having the intrinsic equal moral value of all persons, simply as persons"); *CLONING HUMAN BEINGS*, *supra* note 11, at 50; Heller, *supra* note 37, at 169 (referring to

would become, and be perceived as, merely a sophisticated manufactured⁴¹ product, and the human person reduced to complex machinery.⁴²

These concerns are well taken, in the sense that the broad processes of commodification⁴³ and starkly reductionist views of the human culture⁴⁴ have already long been underway. And it is fair to say that the commodification of life, along with overly reductionist views of life and culture, do not bode well for the deep respect of human dignity in the future. There is ultimately no reason to accord genuine respect to mere commodities, or to mere mechanical objects, however complex or high their market price. Commodities generally do not possess dignity in the sense classically ascribed to humans or to rational persons. Nor is it at all clear why humans would really possess dignity in this sense if being human were thus reducible. We can certainly admire the sophistication of a piece of computer hardware or of a software program. But we do not ascribe genuine dignity to either, or even to their combination.

The idea of respect for human dignity is thus certainly jeopardized by commodification, and by any form of reductionism of the person. But these are very broad processes. From the fact that broad commodification and reductionism in general imperil human dignity, we cannot infer that all popular forms of the much more specific phenomenon of human cloning will also jeopardize human dignity. This

"concerns expressed for the potential to objectify . . . the products of cloning"); Vidal, *supra* note 7, at 109 (seeing as a "counter-indication" of human cloning that "human beings have the dignity of persons and cannot be reduced to 'objects'; the cloning process involves so many interventions, and of such a nature, that it is impossible for it not to treat human reality as an 'object'").

⁴¹ See, e.g., the contribution of Leon R. Kass in LEON R. KASS & JAMES Q. WILSON, *THE ETHICS OF HUMAN CLONING* 87-88 (1998) ("A society that allows cloning has, whether it knows it or not, tacitly said yes to converting procreation into manufacture and to treating our children as pure projects of our will."); Kolehmainen, *supra* note 7, at 561; Garcia, *supra* note 7, at 56 ("When children are manufactured to designer specifications, they and we are all debased and endangered.").

⁴² In the context of embryonic cloning experimentation, see Pontifical Academy For Life, *supra* note 8, at 4.

⁴³ See *supra* note 36.

⁴⁴ See generally, the behaviourist reductionism in B.F. SKINNER, *BEYOND FREEDOM AND DIGNITY* (1971), the sociobiological emphasis in EDWARD O. WILSON, *ON HUMAN NATURE* (1978), and the combination of biology, chemistry, and computer modeling in DANIEL C. DENNETT, *CONSCIOUSNESS EXPLAINED* (1991).

simply does not follow. By way of analogy, we might grant that Napoleon's army threatens Moscow, but still insist that some particular unit of Napoleon's army does not threaten Moscow. This is even clearer if we recognize, by analogy, that army units crucially differ. Some units are less effective in carrying out their intentions than others. Some may even have a sort of "negative" net effectiveness.⁴⁵ They may unintentionally benefit the opposition more than their own formal allies. We shall see how this characterization actually fits the typical forms of the phenomenon of human cloning in relationship to human dignity.

D. Cloning, Individuality, and Identity

Surely, though, there are some sorts of interrelationships among cloning, dignity, and concepts such as individuality,⁴⁶ uniqueness,⁴⁷ and the possession of a distinctive identity.⁴⁸ It has been argued, for example, that human dignity requires that persons be, and be treated as, unique, distinct individuals with separate identities.⁴⁹ It has then been argued that human cloning tends to undermine just the sorts of unique individual personal identities required for human dignity.⁵⁰ However, as it turns out, the relations among human cloning, individual identity, and dignity are far less clear and unequivocal.

⁴⁵ Contrary to their intentions and to nearly universally shared assumptions, for example, a particular military unit might turn out to be of "negative" value through, for example, knowingly or unknowingly betraying the plans or the codes of the army as a whole.

⁴⁶ See, e.g., Andrews, *supra* note 7, at 657 (stating that cloning might involve "eroding the concept of individuality which is at the core of our notions of privacy and autonomy").

⁴⁷ See, e.g., *Religion-Based Perspectives on Cloning of Humans: Testimony Before National Bioethics Advisory Commission*, in 14 ETHICS & MED. 10, 12 (1998) (statement of Albert Moraczewski); Annas, *supra* note 6, at 273 (noting that cloning threatens the prospect of "undermining the uniqueness of every individual on which human dignity is based"); Kavery, *supra* note 7, at 29 (discussing the concern that the knowledge that one has a single progenitor, rather than being a mix of two parents, may undercut the clone child's sense of "uniqueness"); Garcia, *supra* note 7, at 56 (viewing cloning as jeopardizing "human uniqueness and dignity").

⁴⁸ See, e.g., Robertson, *supra* note 7, at 1410 ("The initial reaction to human cloning, particularly in Europe, was that it was a violation of human dignity and identity."); Vidal, *supra* note 7, at 109 (regarding having a distinctive identity: "cloning impacts directly on this basic requirement for being a person"). For a rigorous and useful discussion of the ambiguity of the idea of identity in this context, see also Kathinka Evers, *The Identity of Clones*, 24 J. MED. & PHIL. 67 (1999).

⁴⁹ See *supra* notes 46-48.

⁵⁰ See *supra* notes 46-48, with the exception of Evers, *supra* note 48.

We must first remember that cloning can, at most, undermine individuality or unique personal identity in only certain limited respects. To oversimplify,⁵¹ let us assume that cloning can involve the creation of a person identical at the genetic level to another, perhaps long existing, individual person.⁵² Even if this is possible through cloning, we must then consider intrauterine and other, later environmental effects, and biological developmental processes only imperfectly controlled at the genetic level.⁵³ Let us simply stipulate, for the sake of advancing the argument, that a donor and recipient clone can in some sense share an identity, neither party being in that sense a unique individual, with whatever effects on human dignity may flow from that.

What sort of effects on human dignity should we conclude this to be? After all, identical twins share even an intrauterine environment and similar cultures, yet nobody takes being an identical twin to involve the forfeiture or the jeopardizing of human dignity in any serious sense.⁵⁴ We would not criminalize, or typically impose even mild moral sanctions on, decisions that foreseeably increase the chances of having identical twins. Dressing or otherwise treating identical twins alike is not usually thought to destroy human dignity. Granted, most identical twins are not intended or sought as such, whereas most clones would presumably be deliberately cloned. But what does anyone's intention or lack of intention to create twins or a clone have to do with whether either a clone or an identical twin is an individual with, eventually, a meaningfully distinct identity?

If a person knows that there is someone to whom she is assumedly genetically identical, is not the sheer knowledge that such a person exists, along with any real mutual interaction and ability to affect each other, of greater relevance than whether the twinning or cloning was intended? Let us notice as well that in many cases, the clone donor and clone recipient will be a number of years apart in age. They may therefore in a direct sense not even physically resemble one another at any given time. Both the older and the younger element of the clone pair

⁵¹ See *supra* note 20.

⁵² See Evers, *supra* note 48.

⁵³ See *supra* note 20.

⁵⁴ See Robertson, *supra* note 7, at 1414 ("[T]he claim that human cloning necessarily violates a person's individuality because one does not have a unique genome is not convincing given the widespread existence of twins and the intent of a couple to gestate and rear the resulting child.").

may more closely resemble, along personality dimensions, persons other than their own fellow clone.

Uniqueness itself is unlikely to be crucial to fundamental human dignity, as the case of even unintended identical twinning suggests. And in the case of, say, a forty year old who clones herself, we should remember that the offspring is exactly as genetically non-unique as the progenitor. If the resulting clone has no genetic uniqueness, neither, logically, does the progenitor. Even if the progenitor were not previously a clone, the progenitor herself now has exactly one other person to whom she is assumedly genetically identical. The offspring similarly has exactly one genetic match. If we would likely not conclude in such a case that the forty year old progenitor previously had basic human dignity, but has now lost it along with her genetic individuality, so we should not conclude that the clone offspring lacks human dignity for this reason. She is, after all, no less and no more genetically unique than the assumed single progenitor. She may, of course, be more vulnerable or more malleable in view of her youth and dependency.

Or consider another kind of case, admittedly entirely unrealistic, but nevertheless illuminating. Suppose, obviously contrary to fact, that as a matter of biological law, donating blood or donating one's kidney had the effect of somehow altering the recipient's genetic programming such as to become a genetic copy of the donor. The effects, though, of different experiences and environments, and of differences in age, would remain. Would anyone say that whatever the positive moral value of blood or organ donation, against that must be balanced not only the minimal loss in genetic diversity, but the loss by both donor and recipient of their basic human dignity, given their now shared genetic identity?

This hypothetical case illustrates the strictly limited dignitary significance of merely genetic identity. We do not ordinarily assume that if one twin, raised under conditions of brutal deprivation, turns out one way, we can confidently predict that the other twin, raised under conditions of general supportiveness, will take the same path. Even if they did, they still might do so in recognizably distinctive ways, indicative of one dimension of their individuality. Persons who are genetically alike may differ in quite crucial ways.⁵⁵ And, equally

⁵⁵ See, e.g., Lawrence Wu, Note, *Family Planning Through Human Cloning: Is There a Fundamental Right?*, 98 COLUM. L. REV. 1461, 1496-97 (1998) ("[T]he in-fact individuality of the clonal child should constrain, if not eliminate, the perception of the clonal child as not

crucially, persons who are genetically distinct may resemble one another in crucial respects, so that we might say that they are really, deeply, more like one another than even some identical twins.⁵⁶ We would certainly not see this condition as jeopardizing the basic human dignity of either party.

An equally important response, however, is to recognize that some of the most likely attractive forms of human cloning need not involve even the attempted genetic duplication, insofar as possible, of any one particular person. Even if one wishes to base one's clone on oneself, a particular tycoon, supermodel, athlete, or actor, why not, as it were, with a "vitamin-enhanced" genome? Why not a donor genome purged, as far as we may become technically able, of any significant genetically-based risks of premature physical or mental breakdown?⁵⁷ Why not, as far as possible, minimize the genetic basis in one's chosen basic model for any serious ailment or deficiency? While we are at it, surely the distinction between avoiding genetic deficiency and seeking genetic enhancement will eventually become untenable in practice, if it even makes sense in theory. Why not soup-up or enhance one's chosen genetic model, where possible, with the genetic bases of whatever one or one's culture, finds desirable, valuable, or marketable? Doubtless this is a complex, occasionally frustrating and unpredictable process. What if we start with Michael Jordan's genome and add the genetic bases for about two more inches in height? Do we get an even better basketball player? A worse one? A less commercially marketable player? A marketing disappointment? No basketball player at all? Perhaps a better basketball player three in ten times?

No doubt there will be some harsh disappointments along these lines. No doubt there are uncertainties and sharp biological and cultural limitations in the possibilities of even the most sophisticated future

fully individual No factual basis exists for viewing the clonal child as anything less than fully individual.").

⁵⁶ Cf. LEE M. SILVER, REMAKING EDEN 300 (1998) ("[T]here are surely people alive today . . . who are actually more similar in both looks and personality to a parent than might be expected, on average, with a child who is a genetic clone!").

⁵⁷ See Annas, *supra* note 6, at 267 (referring to the admittedly "futuristic" possibility that "[A]n adult might have him or herself cloned, but add genes or partial gene sequences to his or her genome to try to enhance or better the clone. The enhanced clone would then not be genetically identical, but 'better' in terms of height, immune system, intelligence, or whatever genes could be successfully added to the cell that serves as a nucleus to the enucleated egg.").

genetic manipulations.⁵⁸ But some sorts of such genetic enhancement manipulations, for one reason or another, will surely be popular among future cloners. And one practical implication of these genetic hybridizations, or fortifications, will be clear: the primary genetic model and the cloned offspring will, by the cloner's specific intention, be genetically distinct, separate, non-identical persons. A genetically "enhanced" Michael Jordan clone, however successful or unsuccessful, will certainly not be even genetically identical to Michael Jordan. In this respect, the lack of uniqueness or individuality objection to human cloning, and the associated threat to human dignity, will dissolve.

More deeply, though, we must ask whether uniqueness or individuality, in any sense in which cloning might impair them, is really necessary for human dignity. This is not to deny the romantic and other sorts of appeal of individualism.⁵⁹ Uniqueness and sheer individuality, however, certainly do not themselves confer dignity. Each snowflake, we may assume, is unique, but no snowflake possesses any sort of dignity. Nor do human identical twins, or triplets, lack dignity, regardless of whether their identity was intended, or achieved through technical intervention or not. As one writer has observed, "[i]t is not individuality or identity per se that constitutes a person's dignity. Uniqueness does not determine dignity."⁶⁰

We shall further explore the idea of dignity below.⁶¹ But it should hardly surprise us, despite the influence of the tradition of modern Western individualism,⁶² that dignity does not presuppose genetic individualism. In at least one important sense, dignity is thought to be something we possess not because we are each unique, but because

⁵⁸ For a sense of the limitations and the historical and continuing politics, see, e.g., STEPHEN JAY GOULD, *THE MISMEASURE OF MAN* (1996).

⁵⁹ For stirring tributes to some form of individualism, see, e.g., RALPH WALDO EMERSON, *SELF-RELIANCE: AN ESSAY* (1949); Henry David Thoreau, *On the Duty of Civil Disobedience*, in *LEGAL AND POLITICAL OBLIGATION: CLASSIC AND CONTEMPORARY TEXTS AND COMMENTARY* 25 (R. George Wright ed., 1992). But cf. MICHAEL J. SANDEL, *LIBERALISM AND THE LIMITS OF JUSTICE* (1982) (propounding communitarianism).

⁶⁰ Peters, *supra* note 7, at 22.

⁶¹ See *infra* Parts V & VI.

⁶² See, e.g., C.B. MACPHERSON, *THE POLITICAL THEORY OF POSSESSIVE INDIVIDUALISM: HOBBS TO LOCKE* (1962).

of some widely shared yet crucial quality.⁶³ Dignity is, at its deepest level, as much about something we share as about something we do not share.

III. DIGNITARY OBJECTIONS TO ARGUABLY FREAKISH AND HORRIFYING SPECIAL CASES

Our talk of identical twins and human dignity may provoke a certain impatience. Someone might sensibly concede that identical twins, even if they were somehow intended to be identical, do not suffer any sort of dignitary loss, but that this scenario does not begin to suggest the potential dignitary abuses of human cloning. Even if human cloning in the abstract is not a dignitary abuse, is not human cloning at least subject to abuse? Do not some kinds of human cloning properly evoke objections on dignitary grounds?

We can certainly imagine cloning scenarios ranging from the genuinely freakish to the profoundly horrifying.⁶⁴ We can, for example, imagine conscious or non-conscious, non-mentational clones bred merely to serve as spare bodily organ bags for predesignated transplantation purposes.⁶⁵ We can imagine attempts to literally patent human beings themselves.⁶⁶ We can imagine clones bred as a deliberately stunted, but docile, laboring class.⁶⁷ We can imagine clones bred identically and simultaneously by the hundreds and thousands,

⁶³ See, e.g., IMMANUEL KANT, FOUNDATIONS OF THE METAPHYSICS OF MORALS (Lewis White Beck trans., 1959) (1785) (discussing rationality, the capacity for moral choice, autonomy, and dignity).

⁶⁴ For one widely known such scenario, consider the neo-Nazi plot fictionally elaborated in IRA LEVIN, *THE BOYS FROM BRAZIL* (1995).

⁶⁵ For a defense of spare-parts cloning of non-conscious, non-mentational, merely "structural" quasi-humans, see Michael Tooley, *The Moral Status of the Cloning of Humans*, in HUMAN CLONING 67, 67-77 (James M. Humber & Robert F. Almeder eds., 1998). But cf. Andrews, *supra* note 7, at 657 (discussing clones created merely for possible future spare parts cannibalization); Michael A. Goldman, *Human Cloning: Science Fact and Fiction*, 8 S. CAL. INTERDISC. L.J. 103, 115 (1998) ("The production of humans as culture vessels for spare organs cannot be condoned.").

⁶⁶ See, e.g., MICHAEL J. REISS & ROGER STRAUGHAN, IMPROVING NATURE?: THE SCIENCE AND ETHICS OF HUMAN ENGINEERING 201 (1996) (raising issues of the patenting of genes, life, or whole organisms).

⁶⁷ See, e.g., Robertson, *supra* note 7, at 1418. A bit more broadly, but classically, see HUXLEY, *supra* note **. See also JONATHAN GLOVER, WHAT SORT OF PEOPLE SHOULD THERE BE? 38 (1984) ("We imagine someone breeding a slave species combining the passive subservience of domestic animals with some human intellectual skills.").

raised apart from any sort of family setting or human compassion.⁶⁸ We can imagine clones bred to be enslaved,⁶⁹ perhaps with their genes altered not only for docility, but for enhanced tolerance of pain, radiation, pollution, or other natural harms.⁷⁰

Doubtless the idea of reintroducing historical slavery sounds inconceivable, even if it were somehow economically efficient. Enslaving our genetic peers, or anyone with whom we could have Rawlsian bargaining⁷¹ or a Habermasian democratic conversation⁷² can indeed probably be ruled out as a realistic future possibility. But what if it turns out to be possible to breed genetically altered, stunted clones for certain economically valuable but dangerous or for us typically stultifying, unfulfilling tasks? What if we can breed clones who are

⁶⁸ See, e.g., David M. Byers, *An Absence of Love*, in HUMAN CLONING: RELIGIOUS RESPONSES 66, 75 (Ronald Cole-Turner ed., 1997) ("People tend to see twins and triplets as interesting anomalies; they might see a hundred clones as a herd."); Robertson, *supra* note 7, at 1418-19; Karen H. Rothenberg, 'Being Human': Cloning and the Challenges For Public Policy, 27 HOFSTRA L. REV. 639, 642 (1999).

⁶⁹ See, e.g., R. Albert Mohler, Jr., *The Brave New World of Cloning: A Christian Worldview Perspective*, in HUMAN CLONING: RELIGIOUS RESPONSES 91, 94 (Ronald Cole-Turner ed., 1997) ("In an age of patented forms of life, could a cloned being be 'owned,' at least in genetic pattern?"); Cloning Position Paper of the IIT Institute For Science, Law and Technology Working Group On Reproductive Technologies, 8 S. CAL. INTERDISC. L.J. 87, 98 (1998) ("Legal discussions of whether the replicant is the property of the cloned individual, the same person as the cloned individual, or a resource for organs all show how easily the replicant's own autonomy can be swept aside."); Robertson, *supra* note 7, at 1415 (raising the issue of possible property status or enslavement of clones).

⁷⁰ While it seems self-contradictory to intentionally genetically design a clone to entirely freely consent to a life most of us would find unattractive, there seems no reason in principle why clones could not be at least quite generally "steered" by being denied the minimal genetic basis for developing certain kinds of skills. What we are utterly incapable of doing may never develop much of a fascination for us. In this sense there may be a real affinity between the clone's genetic programming and the tasks to which the clones gravitate.

⁷¹ See generally JOHN RAWLS, A THEORY OF JUSTICE (1971). For a more genuinely bargain-oriented approach to justice, see DAVID GAUTHIER, MORALS BY AGREEMENT (1986).

⁷² See, e.g., JÜRGEN HABERMAS, BETWEEN FACTS AND NORMS: CONTRIBUTIONS TO A DISCOURSE THEORY OF LAW AND DEMOCRACY (William Rehg trans., 1996); JÜRGEN HABERMAS, JUSTIFICATION AND APPLICATION: REMARKS ON DISCOURSE ETHICS (Ciaran Cronin trans., 1993); JÜRGEN HABERMAS, MORAL CONSCIOUSNESS AND COMMUNICATIVE ACTION (Christian Lenhardt & Sherry Weber Nicholsen trans., 1990).

perfectly suited for such tasks, in that they excel at just such tasks, desire no other tasks, and are capable of performing no other tasks?⁷³

What, in short, if there is a market for mixtures of the human and the less than human? What if it is possible to breed only minimally conscious humans with severely reduced cognitive capacity, on the order of the farm animals for which we now insist at best only on minimally pleasant living conditions? What if we can clone what amount to minimally conscious interspecific mixtures, or, more colorfully, economically serviceable chimeras?⁷⁴ Cannot cloning allow us to deliberately blur lines among species⁷⁵ for good or ill, and thereby blur some important moral issues as well?⁷⁶ Just to further complicate matters, some forms of modified clones may be intended to be born or

⁷³ See *supra* note 67 and accompanying text.

⁷⁴ See, e.g., Annas, *supra* note 6, at 251 (discussing the biodesign of 'parahumans' combining the best, or at least the most economically valuable, qualities of humans and animals). There is obviously no reason to suppose that there will be no viable market niche for quasi-persons substantially less capable of moral thought or broad-ranging, general rationality than contemporary persons.

⁷⁵ See, e.g., GLOVER, *supra* note 67, at 41 ("If, instead of there being a clear gap between monkeys and ourselves, genetic mixing resulted in many individuals varying imperceptibly along the continuum between the two species, this might undermine our present belief in the moral importance of the distinction. If it did, the effects might go either way."). Thus while the genetic blending of humans and various other species might, progressively, prompt better treatment of non-human species, we cannot rule out as well the possibility that we might come to see human beings as less morally interesting or as valuable as we currently do. See also REISS & STRAUGHAN, *supra* note 66, at 88. For a further prospective moral line-drawing problem, see George P. Smith, II, *Judicial Decisionmaking in the Age of Biotechnology*, 13 NOTRE DAME J.L. ETHICS & PUB. POL'Y 93, 108-09 (1999) (describing the feasibility of maintaining a conscious, if perhaps typically depressed, severed or decorporated human head, with "a surprising degree of autonomy"). *Id.*

⁷⁶ We can quickly set aside two objections to some of these scenarios. First, scientists need not develop cognitively subhuman clones only by first creating a life form with greater potential and then intentionally sabotaging that potential, as Aldous Huxley envisions. See HUXLEY, *supra* note **. Instead, we could, if it makes any moral difference, create such a life form from the ground up, in the sense that it never at any point had any greater cognitive potential to sabotage. Cf. TOOLEY, *supra* note 65, at 70-71. Second, scientists need not locate women who freely consent to bear any exotic or deliberately stunted form of life. Instead, scientists will, presumably, eventually be able to develop and utilize laboratory-based artificial wombs for such purposes if there is sufficient economic demand. See, e.g., Gregory J. Rokosz, *Human Cloning: Is the Reach of FDA Authority Too Far a Stretch?*, 30 SETON HALL L. REV. 464, 487 n.123 (2000); Michael J. McDaniel, Note, *Regulation of Human Cloning: Implications For Biotechnological Advancement*, 32 VAL. U. L. REV. 543, 558 (1998). For an expanded sense of the imaginative possibilities, see, e.g., Christine Corcos et al., *Double-Take: A Second Look at Cloning, Science Fiction, and Law*, 59 LA. L. REV. 1041 (1999).

adopted into some sort of loving, nurturing family unit, and other forms of clones may not be so intended.

We certainly cannot respond to all of these concerns with bland assurances. Human cloning, by itself or in conjunction with other technologies, has in some cases the potential for the betrayal of human dignity. The potential for misuse, however, does not establish that human cloning in general is broadly morally objectionable. History shows, by analogy, that institutions such as majoritarian democracy⁷⁷ and even constitutionalism⁷⁸ itself can be used to directly and severely undermine human dignity. We should analogously distinguish among different forms, uses, and contexts of human cloning in assessing the relationship between cloning and human dignity. Consider again the analogy to constitutionalism. Unless we have reason to believe that cases at least loosely akin to *Dred Scott* will likely morally dominate constitutional law, we need not conclude that constitutionalism will generally tend to undermine human dignity. By analogy, we can and should separately assess the dignitary status of the more and the less benign forms of human cloning.

IV. HUMAN CLONING, INEQUALITY, AND HUMAN DIGNITY

Separating out the general phenomenon of human cloning from some of its possible abuses hardly establishes, of course, that human cloning itself cannot negatively affect human dignity. Our own legal and cultural history clearly shows that at least some practices that harden inequalities can undermine human dignity.⁷⁹ Should we expect the general practice of human cloning itself to reinforce or worsen social and economic inequalities, thereby undermining human dignity? It is typically assumed that human cloning will indeed tend to reinforce, if not worsen, basic inequalities.⁸⁰

⁷⁷ See, e.g., Fugitive Slave Act of 1793, ch. 7, 1 Stat. 301, amended by Fugitive Slave Act of 1850, ch. 60, 9 Stat. 462-65, repealed by Act of June 28, 1864, ch. 166, 13 Stat. 200.

⁷⁸ See, e.g., *Scott v. Sandford*, 60 U.S. (19 How.) 393 (1856); DAVID P. CURRIE, *THE CONSTITUTION IN THE SUPREME COURT: THE FIRST HUNDRED YEARS, 1789-1888* 264 (1985).

⁷⁹ See, e.g., *supra* note 77.

⁸⁰ See, e.g., GREGORY E. PENCE, *WHO'S AFRAID OF HUMAN CLONING?* 143-44 (1998); Eric A. Posner & Richard A. Posner, *The Demand For Human Cloning*, in *CLONES AND CLONES: FACTS AND FANTASIES ABOUT HUMAN CLONING* 233, 238 (Martha C. Nussbaum & Cass R. Sunstein eds., 1998) ("Cloning, . . . even if cheap, would benefit mostly rich men and women"); *Id.* at 258 ("Cloning may . . . aggravate inequalities in genetic endowment and in

On this point, even the thoughtful and well-recognized defender of human cloning Professor Gregory Pence seems to assume the worst. Pence responds to the worst case scenario which states:

[T]he rich will have better and better kids, who will be smarter, stronger, and more beautiful, while kids of the poor will get dumber, weaker, uglier, and carry more genetic diseases. The poor and the politically powerless have nothing to gain from allowing human [cloning] and perhaps a lot to lose.⁸¹

Perhaps the essence of Professor Pence's response to this argument is that "[a]ll that is true, but so what? Class injustice is not changed by preventing the wealthy from buying X rather than Y; it is prevented by not having some people . . . have wealth."⁸² This sort of argument, however, unnecessarily approaches a sort of combined genetic-economic fatalism.

We should, certainly, remain alert to the possibility that the advantages of the wealthy stem less from objectively superior genetic endowments, and more from a broad range of environmental factors. These factors include the present effects of earlier environmental circumstances, along with a substantial dose of what we might call environmental luck.⁸³ However, there is no reason to suppose that

wealth. . . ."); David Tracy, *Human Cloning and the Public Realm: A Defense of the Intuitions of the Good*, in CLONES AND CLONES: FACTS AND FANTASIES ABOUT HUMAN CLONING 190, 193 (Martha C. Nussbaum & Cass R. Sunstein eds., 1998) (asking whether human cloning would "become (as it easily could if the market decides) a new luxury item for the rich, the beautiful, the talented, the famous?"); Annas, *supra* note 6, at 258 ("In the private market, private interests prevail; those with the money can purchase services from willing sellers."); Cahill, *supra* note 6, at 497 (positing that the poor and uninsured are as likely to be excluded from many of the potential benefits of cloning technology); Shapiro, *supra* note 20, at 563 (discussing his more general concerns that some biotechnology may, as commercially marketed, reinforce social stratifications to the point of irreversibility, such that "[r]ags-to-riches stories will presumably become less likely"); Lee M. Silver, *Medicine's Last Frontier: Ethics of Genetic Engineering*, UNESCO COURIER, Sept. 26, 1999, at 26 (fearing a national division between an elite Genrich Stratum who have invested heavily in the genetic design of their offspring, and the impoverished Naturals, with a diminishing class intermarriage rate).

⁸¹ PENCE, *supra* note 80, at 143-44.

⁸² *Id.*

⁸³ See, e.g., INTELLIGENCE, GENES, AND SUCCESS: SCIENTISTS RESPOND TO THE BELL CURVE (Bernie Devlin et al. eds., 1997); THE BELL CURVE WARS: RACE, INTELLIGENCE, AND THE FUTURE OF AMERICA (Steven Fraser ed., 1995).

Professor Pence is bound to overstate the role of genetics in accounting for the actual class inequalities we may eventually observe. So let us instead focus first on his argument that as long as there are relatively rich persons, they will inevitably just buy something else if they are legally barred from buying another thing, and that the existing class injustice will therefore remain, even if it takes on a different form.

Pence's argument seems to go a bit too fast here. It is hard to believe that the severity of social stratification in the long run has nothing to do with any choices the rich make among consumer spending and investment, or between productive and unproductive choices. Some spending augments one's resources, other spending amounts to dissipation. Suppose we bar the rich from having an expensive *Encyclopedia Britannica* chip implanted into their child's brain. Does it really make no long term difference in terms of social stratification if the rich then spend the money on, say, private tutoring, or on cocaine for themselves or their offspring? Some investments in the future economic status of one's offspring are good human capital investments, and others extremely bad investments, if they count as investments at all. As writers since Plato have observed, the stability of the system of economic stratification can be undermined when the rich choose self-indulgently to "invest" in their own class dissipation.⁸⁴

It is possible that if the rich were barred from investing in cloning or other genetic technology to harden class stratifications, they might not choose an alternative with similar effects. But we should also reconsider the likely effects of human cloning technology on class inequalities and human dignity. There is, crucially, no reason to suppose that human cloning must inevitably strengthen or enhance class inequalities. It may be, certainly, that the rich will have far more than the poor to spend on cloning, and that cloning is the best path to enhancing the prospects of one's offspring. But this is hardly the whole story.

Some among the rich, doubtless, would wish to clone themselves. But if one is rich more because one (or one's ancestor) was lucky in some business decisions than because of any inheritable genetic superiority, cloning one's self is unlikely to tend to freeze the current economic strata in their place. Not all narcissistic tributes to oneself pay off in increased advantages for one's own successor generation. Such a

⁸⁴ See *THE REPUBLIC OF PLATO* 281 (Francis M. Cornford trans., 1945).

person might instead opt for a genetically enhanced, souped up version of him or herself, thereby conferring greater real advantage. But this might well make the resulting clone perhaps both physically and psychologically less like the clone's progenitor, reducing its narcissistic appeal.

Perhaps more importantly, any sheer narcissism among the rich, particularly those whose wealth really does reflect a distinctive, robustly culture-insensitive⁸⁵ inheritable basis, may actually take on a form cutting in favor of both sociobiological⁸⁶ narcissism and an actual decrease in overall genetic inequality. What if, as seems likely enough, even one or a few rich and assumedly somehow genetically advantaged persons decide to subsidize their own cloning, to the special benefit of the poor? In a postmodernist variation of the examples of Johnny Appleseed with regard to apples,⁸⁷ Andrew Carnegie with regard to public libraries,⁸⁸ and Bill Gates with regard to computers and computer programs,⁸⁹ one could donate one's own presumed genetic excellence, perhaps fortified with genetic enhancements, to anyone willing to raise the resulting child.

Only one or a few such donors would be necessary to provide a presumed genetic boost to thousands, if not millions, of economically distressed recipients. Some combination of public spiritedness, curiosity, deep sociobiological impulse, frivolity, and sheer egomania could be counted upon to supply at least a few subsidizing donors. Of course, this sort of genetic supermarket might not be popular with potential child-bearing recipients. Consumer misperceptions, if not outright false advertising, may be both present and legally regulable in any market. But the thought of bearing an enhanced or unenhanced clone of someone one genuinely admires may in some cases seem more appealing than the best realistic alternative, no less among the poor than among others.

⁸⁵ It seems possible that a gene or set of genes that, we shall casually assume, triggered economic success in a given culture, at a given time, under given circumstances, might well not trigger economic success perhaps forty years later, in an inevitably different time and culture. A successful basic attitude toward risk in the year 1960 may well not be equally successful in one's cloned offspring in the year 2000.

⁸⁶ See EDWARD O. WILSON, *SOCIOBIOLOGY: THE NEW SYNTHESIS* (2000).

⁸⁷ See, e.g., VACHEL LINDSAY, *JOHNNY APPLESEED AND OTHER POEMS* (1961).

⁸⁸ See, e.g., ANDREW CARNEGIE, *THE AUTOBIOGRAPHY OF ANDREW CARNEGIE* (1986).

⁸⁹ See, e.g., Beverly Goldberg, *Gates Gives Chicago PL Million-Dollar Connection*, AM. LIB., May 1996, at 19.

One can even imagine bidding wars among a few eager donors, resulting in reduced costs and increased convenience for those willing to enhance a particular donor's circulation count. We can, in any event, certainly imagine this sort of charity on a scale sufficient to undercut the widespread belief that cloning will tend to enhance genetic class inequalities.⁹⁰ Human dignity, in any event, is not seriously threatened by the combined egalitarian and inegalitarian effects of human cloning.⁹¹

V. A KANTIAN APPROACH TO DIGNITY AND HUMAN CLONING

If we are to understand why cloning, in itself, does not generally threaten, and may in fact heighten, the appeal of human dignity, we must think a bit more about the nature of human dignity. There are a number of influential approaches to this idea,⁹² but it is widely held that Immanuel Kant in particular has written suggestively and powerfully on the subject. Kant holds that "rational beings are designated 'persons' because their nature indicates that they are ends in themselves, i.e., things which may not be used merely as a means."⁹³ Kant famously urges: "[a]ct so that you treat humanity, whether in your person or in that of another, always as an end and never as a means only."⁹⁴ Kant explicitly connects this moral status as an end to the idea of dignity in this way: "that which constitutes the condition under which alone something can be an end in itself does not have mere relative worth, i.e., a price, but an intrinsic worth, i.e., *dignity*."⁹⁵

⁹⁰ See *supra* note 80 and accompanying text.

⁹¹ It is possible, however, that the chief harm of this sort of Johnny Appleseed phenomenon could be a dangerous or at least costly reduction in overall human genetic diversity. Genetic diversity is, for various reasons, a good thing. See, e.g., L.M. COOK & R.S. CALLOW, *GENETIC AND EVOLUTIONARY DIVERSITY: THE SPORT OF NATURE* (1999). We shall, however, confidently assume that despite the vast and intense influence of the most popular celebrity fads, general restlessness and boredom with even the most currently popular genetic donors will lead, if only unintendedly, to genetic diversification through the embrace of new genetic models.

⁹² See, e.g., GIOVANNI PICO DELLA MIRANDOLA, *ORATION ON THE DIGNITY OF MAN* (A. Robert Caponigri trans., 1956).

⁹³ KANT, *supra* note 63, at 46.

⁹⁴ *Id.* at 47. For discussion, see, e.g., MARCIA W. BARON, *KANTIAN ETHICS ALMOST WITHOUT APOLOGY* 47 (1999).

⁹⁵ KANT, *supra* note 63, at 53 (emphasis in the original). See also ROBERT PAUL WOLFF, *THE AUTONOMY OF REASON* 186 (1973). Dignity is infinitely beyond price; to try to

Dignity itself of course does not exist freestandingly. Kant urges that "morality and humanity, so far as it is capable of morality, alone have dignity."⁹⁶ Morality in turn, or more precisely the capacity for morality, requires the capacity for the free and rational act of consistent universal moral self-legislation that Kant refers to as autonomy.⁹⁷ While it is dignity that confers this elemental moral worth, dignity is thus dependent upon the variety of elements that go to make up an actor's autonomy.

While not offering a full clarification of Kantian dignity and autonomy, commentators offer some useful insight into them. Allen Wood simultaneously clarifies matters a bit, while raising intriguing questions, in observing that for Kant:

[B]eing an end in itself cannot come in degrees . . . Kant's position therefore has to be that anything having the capacity to set ends and act according to reason is an end in itself, however well or badly it may exercise the capacity. It is a separate question (perhaps a much harder one to answer) how the requirement applies to beings in which humanity is found only to an uncertain degree. The one option not open to Kant is to allow gradations of human dignity or differences in rank among members of the realm of ends.⁹⁸

commensurate the two is to violate the sanctity of dignity itself. See BARBARA HERMAN, *THE PRACTICE OF MORAL JUDGMENT* 125 (1993); H.J. PATON, *THE CATEGORICAL IMPERATIVE* 189 (Pennsylvania Paperback ed., 1971) (1947).

⁹⁶ KANT, *supra* note 63, at 53.

⁹⁷ See *id.* at 54. Kant explicates the idea of autonomy, with its emphasis on freedom, generativity, independence, consistency, rationality, and universality. See *id.* at 51. See also, e.g., GERALD DWORKIN, *THE THEORY AND PRACTICE OF AUTONOMY* 108 (1988) (stating that autonomy is the ability to reflect upon and alter one's motivational structure); THOMAS E. HILL, JR., *DIGNITY AND PRACTICAL REASON IN KANT'S MORAL THEORY* 87 (1992) (defining autonomy as involving rationality as well as "negative" and "positive" freedom); CHRISTINE KORSGAARD, *CREATING THE KINGDOM OF ENDS* 24 (1996) (discussing Kant's linkages among rationality, freedom, and morality).

⁹⁸ ALLEN W. WOOD, *KANT'S ETHICAL THOUGHT* 121 (1999) (emphasis in the original). Professor Wood emphasizes that Kant's focus here is not precisely on the diversely ambiguous idea of "humanity," but on "personality" as the locus of dignity, where "personality" refers specifically not to rational nature in general, but to (any) rational nature with the capacity for moral self-legislation. See *id.* at 115.

As Professor Roger Sullivan elaborates the remaining uncertainties, "Kant unfortunately does not discuss how we are to go about identifying who bears a moral personality . . . He does say that the only beings we in fact know have the status of persons are human beings."⁹⁹ And Kant's own argument commits him to something like the view that "we cannot reasonably deny dignity to any human being," or presumably to any other sort of being, "who is the sort of (minimally) rational agent we take ourselves to be."¹⁰⁰ The morally decisive consideration is the capacity for this sort of minimally rational law-giving, not the number or configuration of our chromosomes, and certainly not whether we share too many genes with one or more specified persons.

Professor Onora O'Neill at this point usefully distinguishes free and rational agents from mere things, props, or implements incapable of agency.¹⁰¹ As imperfect as we may take our freedom and rationality in moral thinking to be, we can certainly generally endorse this distinction. We may attach moral blame to a person's recklessness in not bothering to inspect a reported hazardous wiring problem, and we would certainly not assign any moral blame or responsibility to the actual short circuit itself involved in the resulting fire. If we set aside the more exotic forms of cloning, in which of these categories, then, of persons or things, would we place "garden variety" genetically enhanced or unenhanced clones? Are such adult clones capable of adopting either a reckless or a conscientious attitude toward dangerous wiring? Or are such adult clones really more like the merely mechanical defective circuit itself? The proper Kantian categorization seems clear.

We have seen that there may be close dignitary cases even among non-cloned human beings.¹⁰² But there is certainly nothing in Kant to suggest that "normal" adult clones, appropriately raised, will lack the minimum combinations of the capacities for reason, moral

⁹⁹ ROGER J. SULLIVAN, *IMMANUEL KANT'S MORAL THEORY* 199 (1989).

¹⁰⁰ THOMAS E. HILL, JR., *AUTONOMY AND SELF-RESPECT* 172 (1991).

¹⁰¹ See ONORA O'NEILL, *CONSTRUCTIONS OF REASON: EXPLORATIONS IN KANT'S PRACTICAL PHILOSOPHY* 138 (1989). O'Neill does recognize the possibility of problematic intermediate cases, such as infants, non-human animals, the senile, and the comatose. See *id.* at 138 n.11. For an extended treatment of the admittedly complex ideas of freedom and autonomy in Kant, see HENRY E. ALLISON, *KANT'S THEORY OF FREEDOM* 98 (1990) (discussing autonomy as "the capacity to be moved to action by a rule of action . . . that makes no reference to an agent's needs or interests as a sensuous being"). There is, of course, a sense in which any sensible moral rule must take the needs or interests of embodied beings into account.

¹⁰² See *supra* notes 99-101 and accompanying text.

choice, freedom, generativity, consistency, independence, and universality with which non-cloned human adults typically credit themselves. Jointly, these qualities generate a degree of autonomy¹⁰³ sufficient to bring such clones over the threshold of dignity.¹⁰⁴

Suppose we start with, let us say, two law professors on opposite sides of the globe. Let us try to determine, separately, whether they each possess the minimum degree of autonomy and other qualities necessary to qualify for Kantian dignity. We could, presumably, conclude that we cannot tell whether they are crucially different from mere objects, and that we cannot know whether they possess any degree of freedom or autonomy. Now, this is a sensible conclusion, to which many modern reductionists might subscribe. But it is hardly confinable to a conclusion only about law professors. Inevitably, if these two law professors are incapable of autonomy, and therefore of human dignity, so, probably, is nearly everyone else, clone or non-clone. The headline story would surely not be that clones lack human dignity, but that nearly everyone does. How welcome this result should be must be reserved for another occasion.¹⁰⁵

But if we remain willing to attribute autonomy and hence dignity to the two law professors, will we then change our minds if we learn that, unknown to the two law professors, one is a clone of the other? Or that they are both clone offspring of a third party? Does this make any relevant difference? What if we then delicately break the news of their cloneship, without conveying any more information about their progenitor? Does that revelation necessarily cause their autonomy and dignity to shatter irreparably? What if we then arrange a meeting among all relevant parties? Must there at that point be a destruction of autonomy and dignity, reducing at least one party to the moral status of an elaborate piece of machinery?

But what if, say, in a more extreme case, an overbearing, egomaniacal, neurotic parent, frustrated by a childhood tennis injury, clones a child and compels the cloned offspring to devote herself exclusively to tennis? Perhaps in the most extreme case, the clone's will may be so broken or deformed as to not be capable of the degree of

¹⁰³ See *supra* note 97 and accompanying text.

¹⁰⁴ See *id.*

¹⁰⁵ For a start, see R. George Wright, *Consenting Adults: The Problem of Enhancing Human Dignity Non-Coercively*, 75 B.U. L. REV. 1397 (1995).

autonomy minimally necessary for Kantian dignity. But even this extreme case merely amplifies our experiences with the worst cases of tennis parenting of non-cloned children.¹⁰⁶ Certainly, some naive parents of cloned children may expect too much precisely in virtue of their child's cloned status. Some parents may believe that, for example, Michael Jordan clones should play basketball as well and as lucratively as Michael Jordan. Disappointment, however, is inevitable. Time and bitter experience should eventually temper such expectations. A Michael Jordan professional and commercial career is hardly the inevitable result of the infusion of the Michael Jordan genome.¹⁰⁷

Many parents may not be able to recite, in technical terms, the reasons why genetics is not destiny. But as collective experience gradually accumulates, a parental-cultural-folk wisdom will emerge that will dampen down or prevent unreasonable expectations, and thereby at least some of the most destructive regimentation and browbeating of clone children. Various reasons to clone may still exist, and parental hopes may be both high and realistic in certain limited respects, but there will eventually arise a folk maxim roughly along the lines of "you can lead a clone to water, but you cannot make her drink."

We should thus expect ordinary human clones to be generally capable of the elements of Kantian dignity. Let us illustrate the point more generally. Suppose we think that an apparently ordinary person "A" possesses the requisites of human dignity. And then we encounter person "B" who has the same genome as A, or as close as cloning will permit, because B is in fact a clone of A. We may understandably say, with all the complications added in,¹⁰⁸ that the clone offspring B is, if not genetically identical to the clone progenitor A, at least unusually genetically similar to the progenitor A. Their environments and experiences, uterine and post-uterine, may have varied either relatively little, or else quite dramatically, given any differences of culture, family upbringing, and of history itself.¹⁰⁹

¹⁰⁶ In the most extreme cases, these effects may be approached by the most driven tennis parents.

¹⁰⁷ For some of the reasons, see *supra* note 20 and accompanying text.

¹⁰⁸ See *supra* note 20 and accompanying text.

¹⁰⁹ In an extreme case, presumably, a clone offspring could, through sophisticated technology, be born after the death of the progenitor, or even hundreds of years later.

In all such cases, it would be curious, if not paradoxical, to say that person A and person B are genetically quite similar, roughly akin to the way identical twins or triplets would be,¹¹⁰ and that this genetic similarity, perhaps if it is known to A and B, is itself sufficient to trigger the remarkable result that at least one of the persons A or B, despite their differences, cannot be a Kantian person, and must lack autonomy, resulting in the absence of human dignity and their degradation to the status of a mere object. This sounds realistically possible, however, in only the most extreme, pathological kind of case. Whatever the social and psychological difficulties of being an identical twin,¹¹¹ we do not typically expect such persons to occupy the same dignitary status as extremely complex toasters. Human clones certainly can, and typically will, fare generally well on dignitary grounds, especially those clones that are cared for and created for relatively benign reasons.¹¹²

110 Presumably, identical twins shared a relatively similar uterine environment, early nutritional influences, and early child raising practices, at the same time in the same broader culture. Presumably, most clones will not share all of these similarities to the same degree.

111 Of course, historically it has been true that most parents of identical twins have not intended to have identical twins, although this may be subject to cultural and technological changes. In contrast, those involved in a human cloning process of any sort, for any reason, will know and presumably intend, in some sense, that a clone be the resulting offspring. But there will doubtless be more than one reason for seeking a cloned offspring, and not all of those reasons are linked to any intent to browbeat the resulting clone in such a way as to jeopardize the clone's autonomy and Kantian dignity. As merely one possibility, cloning a beloved and evidently genetically healthy grandparent seems to pose little risk of autonomy destruction.

112. See *supra* note 111. For apparently opposing views, compare Andrews, *supra* note 7, at 668 ("Intentionally producing people whose genetic predispositions are known undermines their free will.") with Dorff, *supra* note 37, at 120 ("Cloning, of course, will, if it is ever effected, produce independent human beings with histories and influences all their own and with their own free will."). Professor Andrews' approach does seem to involve something of an overstatement. Everyone has many genetic predispositions, of varying strengths, and often, we as observers know the most currently relevant such predispositions. But this common state of affairs hardly implies that we can, let alone already have, destroyed the relevant person's free will in the relevant respect. For some general theoretical background, see, e.g., Harry G. Frankfurt, *Alternate Possibilities and Moral Responsibility*, in *MORAL RESPONSIBILITY* 143 (John Martin Fischer ed., 1986); Harry G. Frankfurt, *Coercion and Moral Responsibility*, in *ESSAYS ON FREEDOM OF ACTION* 65 (Ted Honderich ed., 1973); Harry G. Frankfurt, *Freedom of the Will and the Concept of a Person*, in *MORAL RESPONSIBILITY* 65 (John Martin Fischer ed., 1986); Harry G. Frankfurt, *Three Concepts of Free Action*, in *MORAL RESPONSIBILITY* 113 (John Martin Fischer ed., 1986).

VI. THE HUMAN CLONING PROCESS AS HEIGHTENING OUR APPRECIATION
FOR THE BASES OF HUMAN DIGNITY

In some sense, actual human cloning would illustrate the broad scope of our ability to deeply control human lives. But it is equally important that we also recognize a different lesson: the dramatic technical manipulations of human cloning will often have surprisingly little effect on human autonomy and human dignity, largely because autonomy and dignity, and their foundations, are and will remain for us a profound and unassimilable mystery. Human cloning may well serve to highlight, to emphasize, and to set off with greater clarity, quite apart from anyone's intentions, the mysterious capacities that comprise and express our human dignity.

Human beings, after all, will have dignity only to the extent that they are more than the sum of their electrochemical or merely biological parts. We will not possess human dignity if we are reducible to any sort of biological machine, even a highly sophisticated, internally regulated, self-sustaining, genetically-based machine. Instead, we will have human dignity if our highest human capacities, such as making moral judgments and moral choices, are central to what it means to be human and yet remain in a sense deeply unexplainable.

The ironic, unintended effect of human cloning in general is actually to illustrate the profound mystery of what is most crucial to humanity by promoting the demystifying, disenchanting, and technical controlling of nearly everything else about us, so that the grounds of human dignity shine out in stark relief, by way of contrast. Through the actual practice of human cloning, human dignity will be alive and well, in the mysterious realms of consciousness, self-consciousness, free will, moral and other reasoning, and autonomy; even when the genome itself, the physical body and its appearance, and even the possibility of genetic uniqueness and individuality are largely dictated by some controlling agency. By a sort of loose analogy, we learn more about and better appreciate the real nature of magnetism when we discover that we cannot negate magnetism by, let us say, holding a paper between the magnet and its object. It is only when all that might be confused with the sources of human dignity is alienated or stripped away that the real sources of human dignity become most clearly apparent.

Human cloning, presumably, can illustrate our ability to productively manipulate the human genome. If the genome and its mechanical expression were all there were to the human person, the

human person would lack dignity. But it is our very ability to conscientiously choose to manipulate the human genome that itself suggests how we transcend the human genome in profound and inevitably mysterious ways.

Let us build toward the autonomy that Kant sees as constitutive of dignity, or of inner worth beyond price.¹¹³ Let us begin with the utter, and the utterly central, mystery of consciousness itself. David Chalmers has written that:

Conscious experience is at once the most familiar thing in the world and the most mysterious. There is nothing we know about more directly than consciousness, but it is far from clear how to reconcile it with everything else we know. Why does it exist? What does it do? How could it possibly arise from lumpy gray matter? We know consciousness far more intimately than we know the rest of the world, but we understand the rest of the world far better than we understand consciousness.¹¹⁴

Even those who are relatively optimistic concede that "[c]onsciousness stands alone today as a topic that often leaves even the most sophisticated thinkers tongue-tied and confused."¹¹⁵ Others recognize that one's "'own' consciousness, the most obvious thing there is, may be forever beyond our conceptual grasp."¹¹⁶ Still others conclude more decisively that "the bond between the mind and the brain is a deep mystery. Moreover, it is an ultimate mystery, a mystery that

¹¹³ See, e.g., KANT, *supra* note 63, at 51.

¹¹⁴ DAVID J. CHALMERS, *THE CONSCIOUS MIND: IN SEARCH OF A FUNDAMENTAL THEORY* 3 (1996). Chalmers goes on to observe that:

[C]onsciousness is *surprising*. If all we knew about were the facts of physics, and even the facts about dynamics and information processing in complex systems, there would be no compelling reason to postulate the existence of conscious experience. If it were not for our direct evidence in the first-person case, the hypothesis would seem unwarranted; almost mystical, perhaps.

Id. at 5 (emphasis in the original).

¹¹⁵ DENNETT, *supra* note 44, at 22.

¹¹⁶ Steven Pinker, *Silicon Souls*, SUNDAY TIMES-LONDON, Jan. 31, 1999, at 4, available at 1999 WL 7901308.

human intelligence will never unravel."¹¹⁷ It is not as though we have made at least irregular, halting, occasionally retrogressive, intermittent progress toward understanding human consciousness. "We do not just lack a detailed theory; we are entirely in the dark about how consciousness could fit into the natural order."¹¹⁸ To put it another way, it is baffling how we could commensurate the objective and the subjective; "the rich phenomenology of the conscious stream and complex neural phenomena appear to belong to two different orders."¹¹⁹

There are certainly some senses in which we can explain, or explain away, the activity of consciousness. These can involve progress in genuinely productive fields of scientific inquiry, without explaining consciousness in the sense in which we are interested. We can thus at least claim that consciousness confers evolutionary survival value,¹²⁰ that it is analogous in some way to a sophisticated model of information processing,¹²¹ that it is an "emergent property" of complex brain functioning,¹²² or even that consciousness is properly axiomatic and therefore simply not subject to scientific explanation.¹²³

¹¹⁷ COLIN MCGINN, *THE MYSTERIOUS FLAME: CONSCIOUS MINDS IN A MATERIAL WORLD* 5 (1999).

¹¹⁸ CHALMERS, *supra* note 114, at XI. See also MICHAEL LOCKWOOD, *MIND, BRAIN, AND THE QUANTUM* 1 (1989).

¹¹⁹ OWEN FLANAGAN, *CONSCIOUSNESS RECONSIDERED* XI (1992).

¹²⁰ See, e.g., JOHN R. SEARLE, *THE REDISCOVERY OF THE MIND* 107 (1992) (explaining consciousness as enhancing discriminatory powers). But see GALEN STRAWSON, *FREEDOM AND BELIEF* 156 (1986) (discussing non-conscious, including nearly random behavior under appropriate circumstances, as making detection, etc. by a predator more difficult). Whether consciousness actually confers survival value or not is really irrelevant to our point. Explanation in terms of survival value does not really begin to provide an explanation of how a mechanism or process actually arises or operates. We could, for example, account for the persistence of a new ability to teleport objects or naturally generate personal protective force fields through their presumed survival value. But this explanation would not begin to dissolve any mystery as to how we actually go about doing these things.

¹²¹ See ANTHONY KENNY, *THE METAPHYSICS OF MIND* 107 (1992) ("[H]umans are always inclined to explain things we only imperfectly understand in terms of the most advanced technology of the age we live in."). But cf. THOMAS NAGEL, *THE VIEW FROM NOWHERE* 16 (1986) ("[C]urrent attempts to understand the mind by analogy with man-made computers . . . will be recognized as a gigantic waste of time.").

¹²² See, e.g., JOHN R. SEARLE, *THE MYSTERY OF CONSCIOUSNESS* 18 (1997) (explaining consciousness as an emergent property of, and as causally explained, in some fashion, by

Consciousness is but a component, however, of the perhaps even more profound mystery of autonomy, as mediated by self-consciousness. For autonomy to arise, it would seem that consciousness in general must in some part take on the form of a consciousness of our own subjective inner life.¹²⁴ Genuine self-consciousness must be reflected in our consciousness of the fact that some of what we are consciously aware of is in fact ourselves.¹²⁵ And genuine self-consciousness may be central to our very identity and to our further mysterious capacity to act autonomously, or as morally free and responsible rationally deliberative agents.¹²⁶

The mystery of freedom of the will, and of Kantian rational autonomy, is at the heart of the deepest sort of human dignity we would wish to protect. Freedom and autonomy, as bases of Kantian dignity,¹²⁷ are crucial to moral and dignitary value. As Giovanni Pico della Mirandola argues, our freedom of the will allows us in a sense to transcend the externally imposed initial limitations of our nature.¹²⁸ We can thus in a sense shape even our own nature and capacities.¹²⁹

The capacity to freely initiate chains of reasoned thought has long been recognized as of enormous dignitary value. Aristotle, for example, refers to contemplation and intuitive reason as literally, and not merely figuratively, a divine element within all competent persons.¹³⁰ Augustine develops a similar dignitary theme in arguing that "the soul of a beast is nobler than that . . . which only exists without living or understanding. [T]hat which includes existence, life, and understanding,

the brain). Talk of consciousness as an emergent property, however, comes perilously close to merely restating the mystery of consciousness, if in a somewhat stylized way.

¹²³ See, e.g., David J. Chalmers, *Facing Up to the Problem of Consciousness* (June 1999) available at <http://www.u.arizona.edu/~chalmers/papers/facing.html> (taking consciousness itself to be fundamental). We should, however, resist the obvious temptation to bury our deepest, most mysterious, genuine problems by converting them into axiomatic, basic assumptions not susceptible of inquiry.

¹²⁴ See, e.g., LOCKWOOD, *supra* note 118, at 1.

¹²⁵ See, e.g., STRAWSON, *supra* note 120, at 146-47.

¹²⁶ See *id.* at 147.

¹²⁷ See *supra* note 97 and accompanying text.

¹²⁸ See MIRANDOLA, *supra* note 92, at 7.

¹²⁹ See *id.*

¹³⁰ See ARISTOTLE, *THE NICOMACHEAN ETHICS* 330-31 (J.A.K. Thomson trans., (1976); J.O. URMSON, *ARISTOTLE'S ETHICS* 122 (1988).

such as the rational mind of man, is nobler still."¹³¹ Augustine is in turn echoed by Thomas Aquinas,¹³² and then by great humanists such as Pascal.¹³³

No one can doubt the sheer manipulative power of future human cloning techniques. In some cases, that genetically-based power will be reinforced by clear and specific parental expectations, and by close resemblances in appearance between clone and progenitor, at least at the same age. In some respects, even the individuality of the resulting clone or clones could certainly be questioned.¹³⁴

But it is equally clear that the genetic tinkering—even the profound genetic tinkering that cloning in a sense involves—will in its typical instances leave unimpaired the resulting clone's human dignity. Cloning will leave human dignity unimpaired in every case in which it leaves the bases or constituent elements of human dignity, such as the minimally sufficient capacity for rational autonomy, unimpaired.¹³⁵ Human cloning, in its most typical manifestations, should thus at a minimum pose no threat to human dignity.

In fact, human cloning and its associated technical machinations should typically, if quite inadvertently, operate to clarify the nature of human dignity and to heighten our awareness of and appreciation for human dignity. Just as intense heat may serve to purify a metal, so human cloning may clarify what is really essential to human dignity, and what things—including a unique genetic identity—are not. Once the dross of genetic uniqueness and of difference in appearance is largely, if not entirely, burned away, we are left with something more nearly approaching the mystery of human dignity itself.

Now, we may assume that it is possible to do injury to a future clone in the very act of cloning itself,¹³⁶ even if we continue to set aside

¹³¹ ST. AUGUSTINE, *THE PROBLEM OF FREE CHOICE: BOOK II*, § 6.13, at 91 (Dom Mark Pontifex trans., 1955).

¹³² See JOHN FINNIS, *AQUINAS: MORAL, POLITICAL, AND LEGAL THEORY* 178-80 (1998).

¹³³ See PASCAL, *PENSÉES* 125 (A.J. Krailsheimer trans., 1966).

¹³⁴ See *supra* Part II.D.

¹³⁵ See, e.g., Dorff, *supra* note 37, at 120.

¹³⁶ We shall here simply assume that it is possible to do moral wrong to, and even to impair the dignity of, a clone who has not yet been conceived or created, and whose very identity will be created, and not merely altered, by the wrongful act itself. For discussion

all the freakish and horrifying forms of cloning and subsequent social practices that clearly can impair human dignity.¹³⁷ If, for example, we choose to combine commercially subsidized cloning and genetic engineering in such a way that a child is born with the prominent corporate logos of her corporate sponsors as unremovable birthmarks, we are faced with a genuine moral problem.¹³⁸ We cannot neatly sidestep the problem by correctly pointing out that if the subsidizing corporate logos had not been provided for, she herself might never have been born. Either no one would have been born in her stead, or else someone whose identity is clearly different from that of the person actually born would have resulted, so that the person actually born has no grounds for complaint.

We cannot simply evade the problem of the corporate "billboard clone." Being a necessary cause of someone's very existence and identity does not give us a license to humiliate that person. No one should be forced to choose between never having been born, and thus having no identity at all in the first place, and existence as an involuntary human corporate billboard. It is objectionable to require the billboard clone to choose between just that status and not being around at all.¹³⁹

And on the merits, it is contrary to the dignity of the resulting clone to design her as a corporate billboard. It would also be contrary to dignity to design a clone to be unsteady on her feet, for the sake of general amusement in her frequent falls. It would be, as we have suggested, contrary to human dignity to require a clone child to devote herself obsessively to basketball, to the exclusion of all other possible interests and pursuits. And it would be contrary to human dignity to clone a child just for the experimental interest in seeing how she copes

of whether this sort of pre-conceptual, pre-identity harm is even possible, see, e.g., DEREK PARFIT, *REASONS AND PERSONS* 351-79 (1984); Michael Bayles, *Harm to the Unconceived*, 5 PHIL. & PUB. AFF. 292, 297-98 (1976); Gregory S. Kavka, *The Paradox of Future Individuals*, 11 PHIL. & PUB. AFF. 93 (1982); Derek Parfit, *Future Generations: Further Problems*, 11 PHIL. & PUB. AFF. 113 (1982).

¹³⁷ For example, the hypothetical minimal-brain cases discussed *supra* Part III.

¹³⁸ Ideally, of course, it would be possible to combine cloning and commercially subsidized genetic engineering in such a way that the resulting clone had a predictable quite genuine preference for all of her corporate sponsors' products, as opposed to those of their competitors.

¹³⁹ Cf. *Cleveland Bd. of Educ. v. Loudermill*, 470 U.S. 532, 597 (1985) (overruling the requirement to take the "bitter" along with the "sweet" of an employment guarantee in *Arnett v. Kennedy*, 416 U.S. 134 (1974) (plurality opinion)).

with being remarkably unattractive, with being psychologically abandoned, or with closely resembling some easily recognizable, notorious person.

This list of ways in which human cloning could, quite apart from the most horrifying scenarios referred to above,¹⁴⁰ involve dignitary abuses could obviously be lengthened. Plainly, we cannot claim that the human cloning process cannot possibly be used, intentionally or unintentionally, against human dignity. But the same might be said about all sorts of generally worthy activities, including, almost at random, the process of using paint and a paintbrush. Human cloning in itself is no more inimical to human dignity than the process of painting. It is proper to regulate painting through some combination of law, custom, and morality. Generally, it is an offense against dignity to permanently paint unconsenting people as they sleep. Painting certain verbal messages on people, or on the walls of their home, may also be an offense against dignity. Similarly, it will doubtless be proper to regulate even the more benign forms of human cloning through some combination of law, custom, and morality.

One way to reassure ourselves on this score is to notice that, at least in the non-horrific human cloning scenarios, we are really concerned about dignity in two distinct senses. One sense is the more relatively superficial, and is often more largely cultural in nature. It is in this sense that unknowingly wearing a "Kick Me" sign or, more cruelly and severely, being cloned to be amusing in appearance, violate human dignity. Often, cloning indignities in this sense really have nothing to do with cloning itself, in that they could be perpetrated, at least in theory, by other means, as perhaps by cosmetic surgery.

The crucial point to remember, though, is that while the more superficial sorts of cloning indignities may violate human dignity in a morally significant way, they do not touch human dignity in the more profound and ultimately crucial Kantian sense explored above.¹⁴¹ Dignity in this fundamental, utterly mysterious, ultimately valuable sense remains intact and untouched by these relatively superficial sorts of abuses of human cloning. Ultimately, it is from the continuing presence of this deeper, more fundamental sense of human dignity that ordinary insults, humiliations, or similar sorts of dignitary violations

¹⁴⁰ See *supra* Part III.

¹⁴¹ See *supra* Part V.

derive their wrongness. The most common forms of human cloning leave human dignity in this more fundamental sense directly unaffected, and, as we have seen, indirectly heightened.